

C L A I M S

1. Rotary absorption heat pump that comprises a rotary unit (1) that comprises

a vapour generator (2),

a condenser (3),

an evaporator (4) and

an absorber (5)

interconnected to constitute fluid flow trajectories for a volatile fluid component and a liquid absorbing it,

the heat pump also comprising heat transmission means for transmitting heat to the vapour generator (2),

characterised in that said heat transmission means comprise a heat exchanger (6) disposed in the rotary unit (1) through which a hot fluid flows, said heat transmission means also comprising adaptor means in order to transfer said hot fluid from a static environment to said heat exchanger (6).

2. Heat pump according to claim 1, **characterised in that** the heat transmission means also comprise

an inlet conduit (8) and an outlet conduit (9) for the hot fluid that are disposed in the static environment, and

an inlet conduit (10) and an outlet conduit (11) disposed coaxially on the rotation axis (12) of the rotary unit, said inlet and outlet conduits (10,11) connecting the inlet and outlet conduits (8,9) of the static environment with the heat exchanger (6), and the adaptor means comprising a rotary seal (7) that links the static environment with the rotation axis (12) of the rotary unit (1).

3. Heat pump according to claim 2, **characterised in that** the rotary seal (7) comprises a bushing (13) made of a low-friction material disposed between the static environment and the end of the rotation axis (12) of the rotary unit (1).

4. Heat pump according to claim 3, **characterised in that** the bushing (13) is made of graphite.

5. Heat pump according to claims 3 and 4, **characterised in that** the inlet conduit (10) of the rotation axis (12) is in the interior of the outlet conduit (11), the end of said inlet conduit (10) being connected to the inlet conduit (8) of the static environment and the outlet conduit (11) being connected to the outlet conduit (9) of the static environment through a hole (17) disposed on the surface of the rotation axis (12), so that the bushing (13) separates the hot fluid that enters the inlet conduit (10) from the hot fluid that exits the outlet conduit (11).

6. Heat pump according to claim 5, **characterised in that** it also comprises a support (14) and bearings (15) that secure the rotation axis (12), and in that the heat transmission means also comprise a casing (16) attached to said support (14), said casing (16) comprising the inlet conduit (8) and the outlet conduit (9) of the static environment, and the bushing (13) being fixed to the interior of said casing (16).

7. Heat pump according to claim 6, **characterised in that** it also comprises a mechanical fastening (18) that prevents hot fluid from reaching the bearings (15).

8. Heat pump according to any of the preceding claims, **characterised in that** the heat exchanger 6 comprises a spiral pipe, said spiral pipe being corrugated internally and externally.

9. Heat pump according to claim 8, **characterised in that** the heat exchanger 6 is made of nickel-plated copper.

10. Heat pump according to any of the preceding claims, **characterised in that** the condenser 3 is in direct contact with the exterior so that there is direct cooling of the condenser 3 through the air of the exterior.